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(54) Title: **SIGNAL PROCESSING SYSTEM FOR SATELLITE POSITIONING SIGNALS**

(57) Abstract: A signal processing system for processing satellite positioning signals is described. The system comprises at least one processor and a signal processor operating under a number of operational modes. The signal processor includes at least one of a signal processing subsystem, a fast Fourier transform (FFT) subsystem, and a memory subsystem that are each dynamically and independently configurable in response to the operational modes. Further, the system includes a controller that couples to control transfer of data among the signal processing subsystem and the FFT subsystem via the memory subsystem. Configurability of the memory subsystem includes configuring the memory subsystem into regions according to the operational modes where each region is accessible in one of a number of manners according to the operational modes.

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